PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Nobuaki HASHIMOTO

Application No.: New Rule 1.53(b) Continuation of Application No. 09/589,353

Filed: November 26, 2001 Docket No.: 103092.02

For: SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME, CIRCUIT BOARD, AND ELECTRONIC INSTRUMENT

PRELIMINARY AMENDMENT

Director of the U.S. Patent and Trademark Office
Washington, D. C. 20231

Sir:

Prior to initial examination, please amend the above-identified application as follows:

IN THE SPECIFICATION:

Page 11, lines 13-14, delete current paragraph and insert therefor:

Fig. 1A is a cross-sectional view of a first embodiment of the semiconductor device; and Fig. 1B is an enlarged view of the encircled portion of Fig. 1A.

Page 12, lines 18-27, delete current paragraph and insert therefor:

Fig. 1A shows a first embodiment of the semiconductor device. A semiconductor device 10 comprises a semiconductor chip 12, being an example of a semiconductor chip, and an insulating film 14, being an example of a substrate, to which the CSP type of package is applied. On the insulating film 14 are formed external electrodes 16, and the semiconductor chip 12 has a plurality of electrodes 13. In Fig. 1A, the electrodes 13 are formed on only two opposite sides of the semiconductor chip 12, but as is well known, may equally be formed on four sides.

Page 14, lines 4-10, delete current paragraph and insert therefor:

A part of the adhesive 17 enters the penetrating holes 14a. It should be noted that in place of the adhesive 17 may be used an adhesive tape or the like. The wiring pattern 18 is formed so as to pass over the penetrating holes 14a, and although not shown in Fig. 1A, the portions including the position over the penetrating holes 14a are lands of greater width than other portions.

Page 14, line 20 - page 15, line 1, delete current paragraph and insert therefor:

In this embodiment, as shown in enlargement in Fig. 1B, a part of the adhesive 17 is interposed between the base portions 16a of the external electrodes 16 and the penetrating holes 14a. By means of this part of the adhesive 17, stress (thermal stress or mechanical stress) applied to the external electrodes 16 is absorbed. The stress often occurs when heat is applied, and therefore the adhesive 17 is required to have a degree of flexibility and elasticity at least when heat is applied such as to function to absorb the stress.

REMARKS

Claims 1-52 are pending. By this Preliminary Amendment, the specification is amended. Prompt and favorable examination on the merits is respectfully requested.

The attached Appendix includes marked-up copies of each rewritten paragraph (37 C.F.R. §1.121(b)(1)(iii)).

Respectfully submitted,

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APPENDIX

Changes to Specification:

The following are marked-up versions of the amended paragraphs:

Page 11, lines 13-14:

Fig. 1A is a cross-sectional view of a first embodiment of the semiconductor device; and Fig. 1B is an enlarged view of the encircled portion of Fig. 1A.

Page 12, lines 18-27:

Fig. 1A shows a first embodiment of the semiconductor device. A semiconductor device 10 comprises a semiconductor chip 12, being an example of a semiconductor chip, and an insulating film 14, being an example of a substrate, to which the CSP type of package is applied. On the insulating film 14 are formed external electrodes 16, and the semiconductor chip 12 has a plurality of electrodes 13. In Fig. 1A, the electrodes 13 are formed on only two opposite sides of the semiconductor chip 12, but as is well known, may equally be formed on four sides.

Page 14, lines 4-10:

A part of the adhesive 17 enters the penetrating holes 14a. It should be noted that in place of the adhesive 17 may be used an adhesive tape or the like. The wiring pattern 18 is formed so as to pass over the penetrating holes 14a, and although not shown in Fig. 1A, the portions including the position over the penetrating holes 14a are lands of greater width than other portions.

Page 14, line 20 - page 15, line 1:

In this embodiment, as shown in enlargement in Fig. 1B, a part of the adhesive 17 is interposed between the base portions 16a of the external electrodes 16 and the penetrating holes 14a. By means of this part of the adhesive 17, stress (thermal stress or mechanical stress) applied to the external electrodes 16 is absorbed. The stress often occurs when heat is

applied, and therefore the adhesive 17 is required to have a degree of flexibility and elasticity at least when heat is applied such as to function to absorb the stress.